

# Comparisons of Job Characteristics

Focus Occupation: **Physical Scientists, All Other (19-2099)**

Associated Occupation: **Hydrologists (19-2043)**

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

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<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 81

Focus Occupation: Physical Scientists, All Other (19-2099)

Associated Occupation: Hydrologists (19-2043)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Mathematics	9.2	17.7	16.2	0	Current knowledge level may be sufficient
Engineering and Technology	5.7	17.4	12.4	<<	Extensive education and/or training may be required
Geography	3.9	16.7	21.7	>>	Current knowledge level is likely more than sufficient
Physics	4.3	15.7	11.9	<<	Extensive education and/or training may be required
Chemistry	4.8	15.6	4.9	<<	Extensive education and/or training may be required
Biology	3.7	13.6	9.4	<<	Extensive education and/or training may be required
Design	5.2	12.6	6.6	<<	Extensive education and/or training may be required
Law and Government	5.9	11.3	5.6	<<	Extensive education and/or training may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 87

Focus Occupation: Physical Scientists, All Other (19-2099)

Associated Occupation: Hydrologists (19-2043)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Critical Thinking	10.8	14.5	13.2	0	Current skill level may be sufficient
Science	4.5	13.0	13.2	0	Current skill level may be sufficient
Mathematics	6.2	12.8	12.2	0	Current skill level may be sufficient

Programming	2.2	6.5	4.0	<<	Extensive development of skills in this area may be required
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The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 97

**Focus Occupation: Physical Scientists, All Other (19-2099)**

**Associated Occupation: Hydrologists (19-2043)**

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Inductive Reasoning	10.2	14.6	13.8	0	Current ability level may be sufficient
Written Comprehension	11.0	14.6	15.1	0	Current ability level may be sufficient
Written Expression	9.8	14.1	13.6	0	Current ability level may be sufficient
Problem Sensitivity	11.1	13.9	13.5	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	13.8	13.0	0	Current ability level may be sufficient
Deductive Reasoning	10.6	13.4	14.4	0	Current ability level may be sufficient
Flexibility of Closure	7.8	12.0	10.6	<	Some improvement in abilities may be required
Originality	7.6	11.5	9.8	<	Some improvement in abilities may be required
Fluency of Ideas	7.6	11.3	10.6	0	Current ability level may be sufficient
Category Flexibility	9.0	11.2	11.1	0	Current ability level may be sufficient
Number Facility	6.3	10.8	11.2	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

There are no common work activities.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 67

**Focus Occupation: Physical Scientists, All Other (19-2099)**

**Associated Occupation: Hydrologists (19-2043)**

Tools and Technologies	Exclusivity
Business function specific software	1
Cameras	2
Computers	1
Content authoring and editing software	1
Development software	4
Industry specific software	1
Information exchange software	1
Light and wave generating and measuring equipment	4
Network applications software	1
Radar and sonar systems and components	24

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.